

REMARKS

As a first point, the Office Action states claims 1-23 are pending in the application. As mentioned in previous remarks, Applicants note claim 14 was previously cancelled. Applicants respectfully request acknowledgement of the previous cancellation of claim 14. If such cancellation is not of record, Applicant requests the cancellation of claim 14 be entered into the record at this time. Thus, claims 1-13, 15-23, and new claims 24-48 (see below) are considered pending for the purposes of this response.

Claim 1 has been amended herein. The support for this amendment is found on page 14, line 8. Claim 22 has also been herein amended, the support for which can be found on page 9, line 1-2. Claims 24-48 are added. Support for claims 24, 25, 27 and 34 is found on page 9, line 2. Claim 26 is supported on page 9, line 14. Claims 28, 29, 40 and 41 is supported on page 14, line 8-9. The support for claims 30 and 38 can be found on page 11, line 17, and the support for claims 33, 37, 44 and 48 is found on page 4, line 25 to page 5, line 8. Claims 31, 35, 43 and 47 are supported on page 4, line 23 and page 5, line 35. The support for claim 32 and 36 can be found on page 4, line 12. Claims 39, 42 and 46 are supported on page 11, line 21-25. Finally, claim 45 is supported on page 11, line 21-22. No new matter is being added.

Applicants acknowledge the withdrawal of the previous rejections of the pending claims. However, in the present Office Action, claims 1-13, 15-23 are rejected under 35 U.S.C. 103(a) as being anticipated by Johnsson in "Advanced Water Recycling System Required For New South African Mill", or Panchapakesan in "Closure of Mill Whitewater Systems Reduces Water Use, Conserves Energy", or Guss in "Closed Water Systems in Mills Using Secondary Fiber" and Hoffman et al. (US Patent No. 6,071,380) in view of Nagarajan et al. (EP 0805234) further evidenced by Satterfield et al. (U.S. Patent No. 5,755,930). This rejection is respectfully traversed.

The Jonsson, Guss, Panchapakesan and Hoffman references describe the closure of paper mills but do not teach, suggest or disclosure that closure leads to high conductivity in the cellulosic suspension. This is also noted in the Office Action on page 3, line 10-11:

*“none of the above cited references explicitly disclose conductivity”*

Further, none of Jonsson, Guss, Panchapakesan, Hoffman or Satterfield disclose the cationic polymers claimed in the present invention. This is also acknowledged in the Office Action (see page 3, line 16):

*“None of the above cited references teaches also the cationic organic polymer as claimed”*

Satterfield discloses improved retention at “dirty” suspensions, which might be caused by recirculation of whitewater. A high conductivity is also disclosed. However, Satterfield is also completely silent with regard to using a cationic organic polymer having an aromatic group.

Nagarajan relates to a paper making process that comprises adding to a cellulosic suspension a dispersion polymer and microparticles. The polymer can be a cationic polymer with an aromatic group or a non-aromatic polymer. On page 3, line 22 to page 4, line 4 of the Office Action it is stated that:

*“Therefore, using the polymers as taught by Nagarajan et al. in the systems taught by the primary references Jonsson, Panchapakesan, Guss and Hoffman, would have been obvious to one of ordinary skill in the art in order to improve retention. Note that one of ordinary skill in the art would have reasonable expectation of success if the polymers taught by Nagarajan et al. were used as the same purpose, i.e., for improving fiber retention in the system”*

It should be noted that in example 2 of Nagarajan it is showed that the **non-aromatic cationic polymer** gives **better retention** compared to the aromatic cationic polymer.

This is also confirmed by examples 1-3 in the present invention. At low conductivities, 0.47 and 1.375 mS/cm (ex. 1 and 2), the performance of the non-aromatic cationic polymer is better than the aromatic cationic polymer. However, the present invention has unexpectedly found that at higher conductivities, 5.5-10mS/cm (ex. 3) the relationship is the opposite, and the aromatic cationic polymer shows both better retention and dewatering effect.

One of ordinary skill in the art with the aim to improve retention when using a high conductivity stock, absent any teaching, disclosure or suggestion that a particular polymer is better for such stock, would be motivated to choose the polymer with the best performance known in the prior art. As has been described above, Nagarajan teaches that the non-aromatic cationic polymer gives the best retention. Thus, Nagarajan actually teaches away from the claims of the present application and there is no teaching, suggestion or disclosure to motivate the skilled person to use the non-preferred polymer of Nagarajan to improve retention in a high conductivity stock. There is nothing in the cited prior art that would lead a person of ordinary skill to choose a polymer that does not give the best performance solely because a high conductivity stock is used.

There is nothing in the prior art showing that one of ordinary skill in the art would be able to foresee the difference in performance between the non-aromatic and aromatic cationic polymer at high conductivity stocks. Applicants submit that only applicant's disclosure provides any motivation for combining the isolated disclosures of the cited references in the manner combined in the Office Action.

The Applicants respectfully request that the Examiner reconsider the rejection of claims and find the claims in condition for immediate allowance.

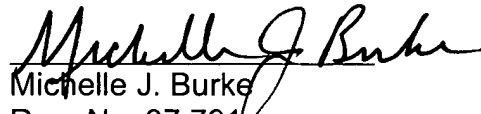
In accordance with Section 714.01 of the M.P.E.P., the following information is presented in the event that the Examiner deems a call desirable:

Michelle J. Burke

(914) 674-5459

Respectfully submitted,

BORE KLEMETS, et al.

  
Michelle J. Burke  
Reg. No. 37,791  
Attorney for Applicants

Akzo Nobel Inc.  
Intellectual Property Dept.  
7 Livingstone Avenue  
Dobbs Ferry, NY 10522-3408